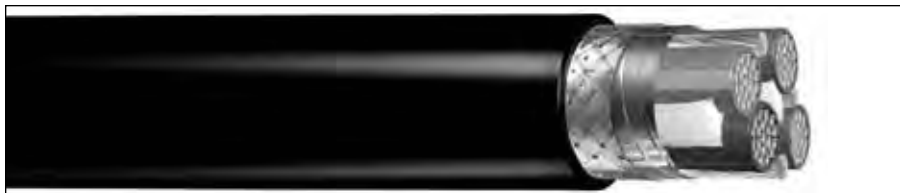


CVTC® VFD - Flexible Motor Supply Cable

XLPE/PVC, Low-Voltage Power, Al/Polyester/Al + TC Braid Shielded, 1000 V UL Flexible Motor Supply and WTTC, 600 V UL Type TC-ER—Method 4 Color Code w/Green/Yellow Ground



Product Construction:

Conductor:

- 16 AWG thru 10 AWG tinned copper per ASTM B33. Class K stranding per ASTM B172
- 8 AWG thru 2 AWG tinned copper per ASTM B33. Class H stranding per ASTM B173

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE) 90°C, VW-1
- Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink

Ground:

- One full-sized green/yellow insulated ground, same AWG size as circuit conductors

Metallic Shield:

- Overall aluminum/polyester/aluminum shield with 25% minimum overlap in conjunction with overall tinned copper braid with 85% coverage and full-sized tinned copper drain wire(s)

Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC), black

Options:

- Colored jackets available upon request
- 2000 V rated designs

Applications:

- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 1000 V
- In free air, raceways or direct burial
- For use in aerial, conduit, open tray and underground duct/installations
- Permitted for use in Class I, Div. 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

Features:

- Rated at 90°C wet or dry
- Combination foil/braid shield provides maximum shield coverage required for Variable Frequency Drive (VFD) applications

Features (cont'd.):

- Meets cold bend test at -25°C
- TC-ER listing meets crush and impact requirements for Type MC cables
- Abrasion- and chemical-resistant
- Stable electrical properties over a broad temperature range
- UV/sunlight-resistant
- Flexible strand conductors for all sizes to allow for ease of installation and long-term performance in light duty flexing applications

Compliances:

Industry Compliances:

- UL 2277 1000 V Flexible Motor Supply Cable and 1000 V Wind Turbine Tray Cable
- UL 1277 600 V Type TC-ER UL File # E57179
- UL 44 Type RHH or RHW-2 conductors
- ICEA S-95-658/NEMA WC70
- CSA C22.2 No. 210 1000 V AWM I/II A/B FT4 SR

Flame Test Compliances:

- UL 1581 VW-1
- IEEE 1202/CSA FT4
- UL 1685

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	COND. STRAND	INSULATED GROUND WIRE SIZE (AWG)	DRAIN WIRE NUMBER X SIZE (AWG)	NOMINAL CONDUCTOR DIAMETER		MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		NET WEIGHT	
						INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km

16 AWG - 2 AWG CONDUCTORS

438070†	3	16	26W	16	1 x 16	0.057	1.40	0.045	1.14	0.045	1.14	0.535	13.59	175	260
438080	3	14	41W	14	1 x 14	0.071	1.80	0.045	1.14	0.060	1.52	0.608	15.44	213	317
438090	3	12	65W	12	1 x 12	0.088	2.20	0.045	1.14	0.060	1.52	0.653	16.59	285	424
438100	3	10	105W	10	1 x 10	0.112	2.80	0.045	1.14	0.060	1.52	0.690	17.53	362	539
438110	3	8	133W	8	4 x 14	0.164	4.17	0.060	1.52	0.080	2.03	0.931	23.65	638	949
438120	3	6	133W	6	4 x 12	0.204	5.18	0.060	1.52	0.080	2.03	1.028	26.11	894	1330
438130	3	4	133W	4	4 x 10	0.260	6.60	0.060	1.52	0.080	2.03	1.163	29.54	1202	1789
438140	3	2	133W	2	4 x 8	0.327	8.31	0.060	1.52	0.080	2.03	1.314	33.38	1665	2478

Dimensions and weights are nominal, subject to industry tolerances.

† 16 AWG conductors are not listed as RHH or RHW-2.



Canadian Standard Association

RoHS Compliant
Directive 2011/65/EU



Phone: 888-593-3355
www.generalcable.com

CVTC® VFD - Flexible Motor Supply Cable

XLPE/PVC, Low-Voltage Power, Al/Polyester/Al TC Braid Shielded, 1000 V UL Flexible Motor Supply and WTTC, 600 V UL Type TC-ER—Method 4 Color Code w/Green/Yellow Ground and Signal Pair

Product Construction:

Conductor:

- 16 AWG to 10 AWG tinned copper per ASTM B33
- Class K stranding per ASTM B172

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE) 90°C, VW-1
- Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink

Ground:

- One full-sized green/yellow insulated ground, same AWG size as circuit conductors

Metallic Shield:

- Overall aluminum/polyester/aluminum shield with 25% minimum overlap in conjunction with overall tinned copper braid with 85% coverage and full-sized tinned copper drain wire(s)

Signal Pair for Brake:

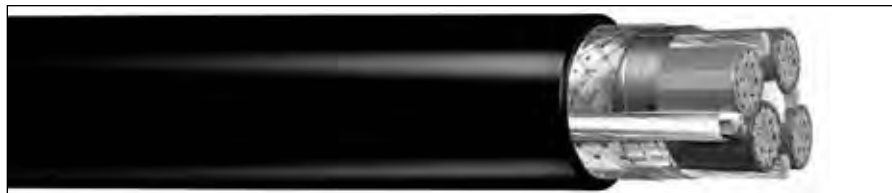
- One 16 AWG (26 x 30) tinned copper signal pair with an overall aluminum foil shield and 18 AWG drain wire
- Black/White color code

Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC), black

Options:

- Colored jackets available upon request
- 2000 V rated designs



Applications:

- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 1000 V
- In free air, raceways or direct burial
- For use in aerial, conduit, open tray and underground duct/installations
- Permitted for use in Class I, Div. 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

Features:

- Rated at 90°C wet or dry
- Combination foil/braid shield provides maximum shield coverage required for Variable Frequency Drive (VFD) applications
- Meets cold bend test at -25°C
- TC-ER listing meets crush and impact requirements for Type MC cables
- Abrasion- and chemical-resistant
- Stable electrical properties over a broad temperature range
- UV/sunlight-resistant
- Flexible strand conductors for all sizes to allow for ease of installation and long-term performance in light duty flexing applications

Compliances:

Industry Compliances:

- UL 2277 1000 V Flexible Motor Supply Cable and 1000 V Wind Turbine Tray Cable
- UL 1277 600 V Type TC-ER UL File # E57179
- UL 44 Type RHH or RHW-2 conductors
- ICEA S-95-658/NEMA WC70
- CSA C22.2 No. 210 1000 V AWM I/II A/B FT4 SR

Flame Test Compliances:

- UL 1581 VW-1
- IEEE 1202/CSA FT4
- UL 1685

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	COND. STRAND	INSULATED GROUND WIRE SIZE (AWG)	DRAIN WIRE SIZE (AWG)	SIGNAL PAIR (AWG)	NOMINAL CONDUCTOR DIAMETER		MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		NET WEIGHT	
							INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km

16 AWG - 10 AWG CONDUCTORS

438150*	3	16	26W	16	16	16	0.057	1.40	0.045	1.14	0.060	1.52	0.750	19.05	324	482
438160*	3	14	41W	14	14	16	0.071	1.80	0.045	1.14	0.060	1.52	0.823	20.90	340	506
438170*	3	12	65W	12	12	16	0.088	2.20	0.045	1.14	0.080	2.03	0.909	23.09	438	652
438180*	3	10	105W	10	10	16	0.112	2.80	0.045	1.14	0.080	2.03	0.997	25.32	563	838

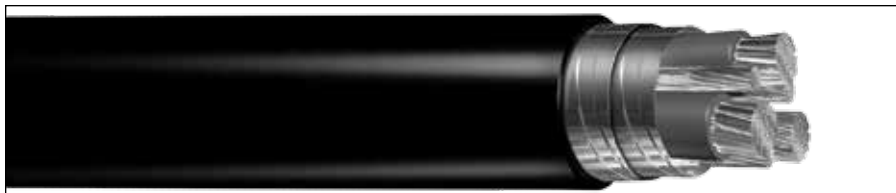
Dimensions and weights are nominal, subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult customer service for price and delivery.

± 16 AWG conductors are not listed as RHH or RHW-2.

CVTC® VFD - Flexible Motor Supply Cable

XLPE/PVC, Low-Voltage Power, Dual Copper Tape Shielded, 1000 V UL Flexible Motor Supply and WTTC, 600 V UL Type TC-ER—Method 4 Color Code



Product Construction:

Conductor:

- 1 AWG thru 4/0 AWG tinned copper
- Class I stranding per ASTM B33, B172

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE) 90°C, VW-1
- Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink

Ground:

- Three symmetrical stranded annealed bare copper grounds per ASTM B8

Metallic Shield:

- Two spirally applied 2 mil copper tapes providing 100% coverage

Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC), black

Options:

- Colored jackets available upon request

Applications:

- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 1000 V
- In free air, raceways or direct burial
- For use in aerial, conduit, open tray and underground duct/installations
- Permitted for use in Class I, Div. 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

Features:

- Rated at 90°C wet or dry
- Dual copper tape shield provides 100% shield coverage

Features (cont'd.):

- Meets cold bend test at -25°C
- TC-ER rating meets crush and impact requirements for Type MC cables
- Abrasion- and chemical-resistant
- Stable electrical properties over a broad temperature range
- UV/sunlight-resistant
- Flexible strand conductors for all sizes to allow for ease of installation

Compliances:

Industry Compliances:

- UL 2277 1000 V Flexible Motor Supply Cable and 1000 V Wind Turbine Tray Cable
- UL 1277 600 V Type TC-ER UL File # E57179
- UL 44 Type XHHW-2 conductors
- ICEA S-95-658/NEMA WC70
- CSA C22.2 No. 210 1000 V AWM I/II A/B FT4 SR

Flame Test Compliances:

- UL 1581 VW-1
- IEEE 1202/CSA FT4
- UL 1685

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	COND. STRAND	GROUND WIRE SIZE (AWG)	NOMINAL CONDUCTOR DIAMETER		MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		NET WEIGHT	
					INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km
1 AWG - 4/0 AWG CONDUCTORS														
438190*	3	1	224W	3 x 6	0.380	9.65	0.055	1.40	0.080	2.03	1.205	30.61	1610	2396
438200	3	1/0	273W	3 x 4	0.410	10.41	0.055	1.40	0.080	2.03	1.295	32.89	2020	3006
438210	3	2/0	323W	3 x 4	0.470	11.90	0.055	1.40	0.080	2.03	1.408	35.76	2325	3460
438220*	3	3/0	456W	3 x 4	0.549	13.94	0.055	1.40	0.080	2.03	1.524	38.71	2680	3988
438230	3	4/0	551W	3 x 2	0.593	14.70	0.055	1.40	0.110	2.80	1.682	42.72	3694	5497

Dimensions and weights are nominal, subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult customer service for price and delivery.



Phone: 888-593-3355
www.generalcable.com

CVTC® VFD

XLPE/PVC, Low-Voltage Power, Shielded
2000 V, UL Type TC-ER¹—Method 4 Color Code

Product Construction:

Conductor:

- 14 AWG thru 500 kcmil fully annealed tinned stranded copper
- Class B stranding per ASTM B8

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE)—90°C, VW-1
- Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink

Ground:

- 3 symmetrically placed annealed tinned copper conductors in direct contact with shield
- Class B stranding per ASTM B8

Dual Shield:

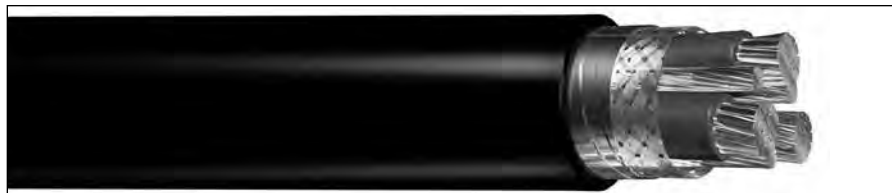
- Overall tinned copper braided shield in conjunction with an aluminum/polymer tape shield

Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:

- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 2000 volts. These motor drive systems require cables that are designed to prevent radio frequency interference (RFI) which can lead to malfunction



Applications (cont'd.):

- In raceways, cable trays or direct burial
- In wet or dry locations
- Permitted for use in Class I, Division 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

Features:

- Rated at 90°C wet or dry
- Dual shield provides maximum shield coverage required for Variable Frequency Drive (VFD) applications
- Meets cold bend test at -25°C
- Meets crush and impact requirements to Type MC cable
- Abrasion- and chemical-resistant
- Excellent electrical properties
- Sunlight- and weather-resistant

Compliances:

Industry Compliances:

- UL 1277 Type TC-ER, UL File # E57179
- UL Type RHH or RHW-2 conductors per UL 44

Flame Test Compliances:

- UL 1581/UL 2556 VW-1
- UL 1685 Vertical Flame Test
- IEEE 383
- IEEE 1202
- ICEA T-29-520

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	COND. STRAND	GROUND WIRE SIZE (AWG)	MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
					INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km

14 AWG - 500 kcmil CONDUCTORS

384730*	3	14	7W	3 x 18	0.060	1.52	0.060	1.52	0.565	14.35	79	118	190	283
384740*	3	12	7W	3 x 16	0.060	1.52	0.060	1.52	0.605	15.37	114	170	236	351
384750*	3	10	7W	3 x 14	0.060	1.52	0.060	1.52	0.665	16.89	172	256	313	466
384760*	3	8	7W	3 x 14	0.070	1.78	0.060	1.52	0.785	19.94	234	348	420	625
384770*	3	6	7W	3 x 12	0.070	1.78	0.080	2.03	0.910	23.11	354	527	605	900
384780*	3	4	7W	3 x 12	0.070	1.78	0.080	2.03	1.010	25.65	507	755	800	1191
384790*	3	2	7W	3 x 10	0.070	1.78	0.080	2.03	1.315	28.83	783	1165	1126	1676
384800*	3	1/0	19W	3 x 6	0.090	2.29	0.080	2.03	1.390	35.31	1251	1861	1832	2726
384810*	3	2/0	19W	3 x 6	0.090	2.29	0.080	2.03	1.490	37.85	1511	2248	2134	3175
384820*	3	3/0	19W	3 x 5	0.090	2.29	0.080	2.03	1.595	40.51	1897	2823	2553	3799
384830*	3	4/0	19W	3 x 4	0.090	2.29	0.110	2.79	1.775	45.09	2355	3504	3254	4842
384840*	3	250	37W	3 x 4	0.105	2.67	0.110	2.79	1.940	49.28	2719	4046	3726	5544
384850*	3	350	37W	3 x 2	0.105	2.67	0.110	2.79	2.160	54.86	3883	5778	5040	7500
384860*	3	500	37W	3 x 1	0.105	2.67	0.110	2.79	2.440	61.98	5507	8194	6809	10132

Dimensions and weights are nominal; subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

¹ Approved as TYPE TC-ER for Exposed Run applications of 3 or more conductors as defined by NEC.

CVTC® VFD

XLPE/PVC, Low-Voltage Power, Copper Tape Shielded
2000 V, UL Type TC-ER¹—Method 4 Color Code



Product Construction:

Conductor:

- 14 AWG thru 500 kcmil fully annealed bare stranded copper
- Class B stranding per ASTM B8

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE)—90°C, VW-1
- Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink

Ground:

- 3 symmetrically placed annealed bare copper conductors in direct contact with shield
- Class B stranding per ASTM B8

Metallic Shield:

- Overall 5 mil annealed bare copper tape shield with 50% overlap

Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:

- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 2000 volts. These motor drive systems require cables that are designed to prevent radio frequency interference (RFI) which can lead to malfunction
- In raceways, cable trays or direct burial
- In wet or dry locations
- Permitted for use in Class I, Division 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

Features:

- Rated at 90°C wet or dry
- Overlapped bare copper tape shield provides necessary shield coverage required for Variable Frequency Drive (VFD) applications
- Meets cold bend test at -25°C
- Meets crush and impact requirements for Type MC cable
- Abrasion- and chemical-resistant
- Excellent electrical properties
- Sunlight- and weather-resistant

Compliances:

Industry Compliances:

- UL 1277 Type TC-ER, 2000 V, UL File # E57179
- UL Type RHH or RHW-2 conductors per UL 44

Flame Test Compliances:

- UL 1581/UL 2556 VW-1
- UL 1685 Vertical Flame Test
- IEEE 383
- IEEE 1202
- ICEA T-29-520

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	COND. STRAND	GROUND WIRE SIZE (AWG)	MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
					INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km
14 AWG - 500 kcmil CONDUCTORS														
395070V	3	14	7W	3 x 18	0.060	1.52	0.060	1.52	0.580	14.73	91	135	212	315
395080V	3	12	7W	3 x 16	0.060	1.52	0.060	1.52	0.615	15.37	127	189	260	387
395090V	3	10	7W	3 x 14	0.060	1.52	0.060	1.52	0.670	17.02	183	272	329	490
395100V	3	8	7W	3 x 14	0.070	1.78	0.060	1.52	0.770	19.56	246	366	441	656
395110V	3	6	7W	3 x 12	0.070	1.78	0.080	2.03	0.895	22.73	368	548	618	920
395120V	3	4	7W	3 x 12	0.070	1.78	0.080	2.03	0.995	25.27	522	777	830	1235
395130V	3	2	7W	3 x 10	0.070	1.78	0.080	2.03	1.125	28.58	801	1192	1152	1714
395140V	3	1/0	19W	3 x 6	0.090	2.29	0.080	2.03	1.385	35.18	1348	2006	1853	2757
395150V	3	2/0	19W	3 x 6	0.090	2.29	0.080	2.03	1.480	37.59	1616	2405	2169	3227
395160V*	3	3/0	19W	3 x 5	0.090	2.29	0.080	2.03	1.590	40.39	2010	2991	2619	3897
395170V	3	4/0	19W	3 x 4	0.090	2.29	0.110	2.79	1.780	45.21	2517	3745	3241	4823
395180V*	3	250	37W	3 x 4	0.105	2.67	0.110	2.79	1.940	49.28	2895	4308	3763	5599
395190V	3	350	37W	3 x 2	0.105	2.67	0.110	2.79	2.160	54.86	4089	6084	5109	7602
395200V	3	500	37W	3 x 1	0.105	2.67	0.110	2.79	2.455	62.36	5693	8471	6933	10316

Dimensions and weights are nominal; subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

¹ Approved as TYPE TC-ER for Exposed Run applications of 3 or more conductors as defined by NEC.